

Appl. No. 10/783,081
Reply to Office action of 11/30/2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-15 (canceled).

16. (currently amended) A semiconductor structure, comprising:
a semiconductor substrate having a surface;
a gate stack outward of the surface of the semiconductor substrate, the gate stack comprising:
a nitrided silicon oxide layer comprising an oxide layer beneath a nitride layer, wherein the nitride layer has a maximum atomic percentage of nitrogen of between 10 and 20 percent and the oxide layer has a maximum atomic percentage of nitrogen of between 8 and 14 percent;
a high-K dielectric layer outward of the nitrided silicon oxide layer; and
a conductive layer outward of the high-K layer;
sidewall spacers outward of the semiconductor substrate adjacent to the gate stack; and
source/drain regions in the semiconductor substrate adjacent to the sidewall spacers.

17. (cancelled)

18. (original) The semiconductor structure of Claim 16, wherein a thickness of the nitrided silicon oxide layer is less than about 20 Angstroms.

19. (original) The semiconductor structure of Claim 16, wherein the high-K dielectric layer comprises an oxygen-containing material.

Appl. No. 10/783,081

Reply to Office action of 11/30/2004

20. (original) The semiconductor structure of Claim 16, wherein the high-K dielectric layer comprises a material selected from the group consisting of Ta_2O_5 , BaTiO_3 , TiO_2 , CeO_2 , and barium strontium titanate.